

i.MX 6 Yocto Project L3.14.38_6UL Patch Release Notes

1 Release Purpose

The purpose of this patch release is to provide updates and fixes for the L3.14.38_6UL GA release. The L3.14.38_6UL_patch release affects the following components:

- Kernel
- U-Boot

This release supports the following i.MX 6 boards:

- i.MX 6UltraLite EVK
- i.MX 6UltraLite 9x9 EVK

This release was only tested on i.MX 6 UltraLite 9x9 EVK platform.

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2 Patch Descriptions

The following table provides the patch descriptions for this release.

Table 1. Patch descriptions

Component	Description
Kernel	<ul style="list-style-type: none"> • MLK-11492 ARM: imx: keep weak 2p5 on for USB vbus wakeup. • MLK-11491 ARM: imx: dis-connect vddhigh_in and vddsnvs_in for imx6ul • MLK-11489 i.MX6UL: Add the 9x9-evk-csi.dts for the camera module • MLK-11465-2: ARM: dts: imx7d/imx6ul: update SW1A for PFUZE3000 • MLK-11465-1: regulator: pfuze100: update voltage setting for SW1A of PF3000 • MLK-11461-2 ARM: dts: imx6ul: add LDO enable dtb for 9x9 evk board • MLK-11461-1 ARM: dts: imx6ul: add LDO bypass support for 9x9 EVK • MLK-11366-2 ARM: imx: add suspend/resume support for imx6ul lpddr2 • MLK-11366-1 ARM: dts: imx6ul: add 9x9-lpddr2-evk board
U-Boot	<ul style="list-style-type: none"> • MLK-11554 imx: mx6ulevk: Modify the mtest memory end to half of PHYS_SDRAM_SIZE • MLK-11549 imx: imx6ul: enlarge MMDC_MAPSR.PST to 16 • MLK-11505 imx: mx6ul: Disable the LCDIF before system reset • MLK-11486 imx: mx6ul 9x9 evk correct CS0_END • MLK-11490 ARM: imx: imx6ul: disable pfuze3000 low power mode • MLK-11478 imx: mx6ul: Add QSPINOR boot support on mx6ul 9x9 evk board • MLK-11461 imx: imx6ul: enable LDO bypass for 9x9 EVK board • MLK-11367 imx: mx6ul: Add cma bootargs for 6ul 9x9 board • MLK-11364 imx: mx6ul : Add support for i.MX6UL 9x9 EVK board

3 Installation and Build Instructions

This section describes how to install the patch release.

For host setup and Yocto Project setup instructions, see the *Freescale Yocto Project User's Guide* (IMXLXYOCTOUG).

3.1 Installing Yocto Project layers

To set up the manifest and download the Yocto Project layers, use the following commands:

```
mkdir yocto_3.14.38-6UL
cd yocto_3.14.38-6UL
repo init -u git://git.freescale.com/imx/fsl-arm-yocto-bsp.git -b imx-3.14.38-6UL_patch
repo sync
```

3.2 Choosing a graphical back end

Before the setup, choose a graphical back end. The default is X11.

Choose one of the following graphical back ends:

- X11
- Wayland: using the Weston compositor

- DirectFB
- FrameBuffer

Specify a machine configuration for each graphical back end. Examples for each back end are:

- For X11:

```
MACHINE=imx6ul9x9evk source fsl-setup-release.sh -b build-x11 -e x11
```

NOTE

Qt 5 is not supported on any i.MX 6 UltraLite platform.

The `fsl-setup-release` script installs the `meta-fsl-bsp-release` layer and configures the `DISTRO_FEATURES` required for choosing the graphical back end. The `-b` parameter specifies a build directory target. In the build directory, a `conf` directory is created from `setup` that contains the `local.conf` file, where `MACHINE` and `DISTRO_FEATURES` are set. The `meta-fsl-bsp-release` layer is added into the `bblayer.conf` file in the `conf` directory under the build directory specified by the `-e` parameter.

3.3 Choosing an image target

Choose an image target to build. The following are image examples:

- `core-image-minimal`: builds minimal kernel and U-Boot
- `fsl-image-gui`: builds a non-Qt 5 image for X11, Frame Buffer, DirectFB, and Wayland graphical backends.
- `fsl-image-qt5`: builds a Qt 5 image for X11, Frame Buffer, and Wayland graphical backends.

This release is for the Fido Yocto Project and does not support integration of features from later Yocto releases.

3.4 Building an image target

```
bitbake <image>
```

Examples:

- For building a non Qt 5 image:

```
bitbake fsl-image-gui
```

- For building a Qt 5 image for X11, Frame Buffer, and Wayland graphical backends:

```
bitbake fsl-image-qt5
```

To initialize the build environment when the session exits, run the following command in the directory above the build directory:

```
setup-environment <build directory>
```

4 References

- For details on setting up the Host and Yocto Project, see the *Freescale Yocto Project User's Guide* (IMXLXYOCTOUG).
- For details on boot switch settings (which is the same as those for the i.MX6 UltraLite EVK board), see "How to boot the i.MX boards" in the *i.MX Linux® User's Guide* (IMXLUG).

References

- For information on downloading images using U-Boot, see "Downloading images using U-Boot" in the *i.MX Linux® User's Guide* (IMXLUG).
- For information on setting up an SD/MMC card, see "Preparing an SD/MMC card to boot" in the *i.MX Linux® User's Guide* (IMXLUG).

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